

BIBLIOGRAPHICAL NOTICE.

On supposed Remains of Organisms from the Pre-Cambrian Strata of Brittany. By HERMANN RAUFF, of Bonn. With illustrative cuts.

Ueber angebliche Organismenreste u. s. w. From the 'Neues Jahrbuch für Mineralogie,' &c., 1896, Bd. i.

THE Author reviews the results arrived at by M. Cayeux in his microscopic researches in these old rocks. After examining specimens himself, Herr Rauff thinks that the so-called Sponge-spicules are inorganic—merely microscopic threads and granules of some decomposed metallic mineral, most likely pyrites.

He notices the extremely minute size and relatively enormous number of the so-called Radiolarians. He observes that M. Cayeux regards the matrix as having been crystallized from an original state of Radiolarian earth; and Rauff asks if any one could determine optically the isotropic nature of the delicate and thin shells and skeletons in the anisotropic enveloping material. He also asks why M. Cayeux holds it possible that the Radiolarian skeletons, in spite of the crystallizing of the quartzose medium in which they lie, could keep their original colloidal silica, whilst for his Sponge-spicules he does not allow of its possible preservation. Rauff concludes that these so-called Radiolarians and Sponge-spicules are minute spherical granules of some modified metallic mineral, probably pyrites, in touch or coalescence one with another. Independent corroboration of his views he finds in Dr. Hinde's remarks on some similar minute bodies in the 'Quarterly Journal of the Geological Society,' vol. li. p. 631.

MISCELLANEOUS.

Modifications produced in the Organs of Sense and of Nutrition in certain Arthropods by confinement in Caves.* By M. ARMAND VIRÉ.

NOWHERE does the influence of environment show itself more markedly or in a more striking manner than in caverns: the absence of light and the scarcity of prey produce in animals which are drawn into them, and succeed in acclimatizing themselves therein, modifications of various kinds.

The eye, *always atrophied*, is more or less so according to the species and the individuals of the same species. In certain Amphipod Crustaceans (*Gammarus*, nov. species) it presents varying intermediate states between the almost normal eye, of a blood-red colour and apparently still capable of perceiving certain luminous sensations, and the completely depigmented eye, in which nothing is preserved beyond the *external* primitive form. Some individuals exhibit varying degrees of atrophy in one eye and the other.

* Researches made in the Jura in 1894-95 and in the physiological laboratory of the Sorbonne.